From: ANDERSON Jim M

To: <u>Eric Blischke/R10/USEPA/US@EPA; Chip Humphrey/R10/USEPA/US@EPA</u>
Cc: <u>MCCLINCY Matt; GAINER Tom; PETERSON Jenn L; POULSEN Mike</u>

Subject: Estimation of Temporal Changes FSP

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Eric.

I haven't read LWG's short 12/10/07 "RD 3B Comprehensive Sediment & Bioassay Testing FSP-Addendum 1- F&Tmodeling- Estimation of Temporal Chemistry Changes in Surface Sediment" yet, but I wanted to get you a basic comment (b) (6)

I don't think EPA/partners should approve this FSP addendum because I don't think the data will necessarily satisfy the stated data uses. I understand data needs were originally identified for the F&TM, but I don't know if the proposed sampling efforts will fill those needs. I think we all agree there are inherent concerns with replicate sampling..., for instance chemical concentrations can change dramatically over a very short distance. Let's say certain chemical concentrations have in fact decreased over time due to natural recovery processes. Let's also look at 2 possible outcomes.

1st, the LWG re-occupies a previously sampled station & the replicate sample has higher concentrations than the original sample because the replicate sample was not collected in precisely the same location of the previous sample..., & the new location is closer to a sediment source area of higher concentrations. Does the LWG throw these results out because the don't concur with the expectation that NR is occurring & concentrations should decline over time?

2nd, the LWG re-occupies another previously sampled station & the replicate sample shows lower concentrations than the original sample because the replicate sample was again not collected in precisely the same location as the previous sample..., & the new location has lower concentrations. Can the LWG attribute this to NR or to concentration gradients?

James M. Anderson Manager, Portland Harbor Section DEQ NWR Phone (503) 229-6825 Cell (971) 563-1434 Fax (503) 229-6899